Erratum to: A multi-stage representation of cell proliferation as a Markov process

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Equations (9) and (10) were transcribed incorrectly.

Equation (9) originally read

$$\frac{\mathrm{d}^k M_k}{\mathrm{d}t^k} = 2\left(\frac{k}{C}\right)^k M_k.$$

In fact, we should first have introduced scaled variables $m_j = M_j e^{kt/C}$, for $j = 1, \ldots, k$.

Equation (9) should then have read

$$\frac{\mathrm{d}^k m_k}{\mathrm{d}t^k} = 2\left(\frac{k}{C}\right)^k m_k.$$

Similarly, equation (10) originally read

$$M_j = \left(\frac{C}{k}\right)^{k-j} \frac{\mathrm{d}^k M_k}{\mathrm{d}t^k}, \quad \text{for} \quad j = 1, \ldots, k-1.$$

It should have read

$$m_j = \left(\frac{C}{k}\right)^{k-j} \frac{\mathrm{d}^{k-j} m_k}{\mathrm{d}t^{k-j}}, \quad \text{for} \quad j = 1, \ldots, k-1.$$

The equation should have been for the m_js and not the M_js and the order of the derivative was incorrect.

In addition, after equation (11), z should be defined as "the first k^{th} root of unity", not "the first n^{th} root of unity".

The expression on the right-hand side of Equation (16) is also missing a factor of z^r in the numerator of the fraction inside the sum.

Originally it read

$$M(t) = \frac{1}{2k} \sum_{r=0}^{k-1} \frac{2^{1/k}}{2^{1/k} z^r - 1} \exp\left((2^{1/k} z^r - 1) kt/C\right).$$

However, it should have read

$$M(t) = \frac{1}{2k} \sum_{r=0}^{k-1} \frac{2^{1/k} z^r}{2^{1/k} z^r - 1} \exp\left((2^{1/k} z^r - 1) kt/C\right).$$

In the top line of equation (25) the subscript n on $\hat{M}_n$ should have been a k leading to the corrected system

$$\frac{d\hat{M}_j}{dt} = \begin{cases} \lambda_1 \left(2\hat{M}_k - \hat{M}_1 - \hat{M}_1 \hat{M}_k\right), & \text{for} \quad j = 1, \\ \lambda_1 \left(\hat{M}_{j-1} - \hat{M}_j - \hat{M}_j \hat{M}_k\right), & \text{for} \quad j \neq 1. \end{cases}$$

Since these were just transcription errors they were corrected for in later equations and did not effect the results of the paper, but simply made it harder to follow the working.